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HUNTING EULOTA (KARAFTOHELIX) FISCINA FULTON, IN SAGHALIEN

BY DANIEL B. LANGFORD

The southern part of Saghalien, under Japanese administration, consists of two parallel ridges, extending almost due north and south and separated by a wide marshy valley cut up by an intricate network of small creeks and streams. The western and highest ridge comprises a series of sharp peaks quite uniform in height, the average altitude being around 3000 feet. The eastern side of this ridge being cut up by numerous deep narrow gulches which support a very heavy vegetation. The eastern ridge comprises a chain of rounded hills, heavily forested on the top and sides, culminating in the peak of Tiara, 1950 feet in height.

Until a comparatively recent date this part of Saghalien was heavily forested with pine, larch, spruce, white birch, willow and a dense undergrowth of various large leaved plants, bushes and ferns. Lumbering, forest fires and the ravages of the caterpillar of a species of *Dendrolimus* have combined to destroy vast areas of the larger trees and this destruction is at present continuing at an alarming rate.

Conspicuous among the plants of the forest undergrowth is a giant composite (*Petasites japonicus* var. *giganteus*),

called "Akitabuki" by the Japanese. The leaves of this plant often attain a diameter of six feet and are borne on stems as high as a man's head and three inches in diameter. Another large leaved plant is "O-itadori" (*Polygonum sachalinense* Fr. Schm.), having leaves often a foot in length and the soft, woody stems growing to a height of fifteen feet. A nettle "Yezo Irakusa" (*Urtica dioica*, var. *platyphylla* Wedd.) grows everywhere in great luxuriance.

The central plain is practically denuded of large forest trees and is covered with tall grass with razor-like serrated edges, second growth conifers and white birch. Thickets of willow and the usual undergrowth are found along the numerous small streams.

The first specimens of *E. fiscina*, to come to my notice were collected by a student of the Imperial University during the summer of 1923. These specimens came from Maoka, on the west coast, on the leaves of "Akitabuki". The following year an opportunity came to visit the island and the last week of July was spent collecting over the southern end of the island. Specimens taken at this time were figured by Pilsbry, Proc. A. N. S. Phila., 1927, plate I.

The snail was collected at three localities: Ichinosawa, about three miles to the west of Odomari at the end of the central valley and but a short distance from the coast at a very low elevation; Kiminai, some 18 miles to the north east of Odomari in the valley of the Kiminai River at an elevation of about 500 feet, situated on the Pacific coast slope of the eastern ridge; and at Kawakami, 18 miles north west of Toyohara on the eastern slope of the west ridge at an elevation of about 1000 feet.

Experience indicates that this species inhabits damp situations along the creeks, preferring deep shade under the large leaved plants, and apparently feeding on decaying leaves and other soft decaying vegetation. No specimens were taken on the tops of the ridges nor at any great distance up the sides of the gulches. It almost invariably was found associated with the plants "Akitabuki", "O-itadori" and "Yezo Irakusa".

But five specimens were taken at Ichinosawa, two adult and three immature. These were on or near the ground in thickets along the Ichinosawa River. At Kiminai 30 specimens were taken. This region is quite heavily forested. The snails were under thickets of their favorite plants and mostly on the ground or low down on the stems of "Akita-buki", a few being on the under side of the leaves. It was raining heavily at the time. At Kawakami the snails were located in numbers. More than 300 magnificent specimens were taken in a few hours of collecting. About half a mile below the inn at Kawakami is a steep narrow gulch branching off from the south side of the river. A small stream winds along the bottom. A short distance up this gulch the favorite plants of *fiscina* grow in great profusion and completely clothe the sides and bottom of the valley. The nettle is particularly rank here.

On this day the sun was beating down with tropical fierceness and the ground fairly steaming from the heat. The majority of specimens were on the under sides of leaves or on the stems of plants, only a small number being found on the ground. Frequently they would be found on the tops of leaves in the glaring sun. All thus exposed were much faded in color and the "skin" peeling off indicating that this exposure had continued for some length of time.

Three species of Tabanidae, of exceptionally bloodthirsty natures, swarms of mosquitoes, innumerable gnats, called "buyo", which cause intense pain followed by almost unbearable itching and finally swelling and large blisters, and the nettle, a slight touch producing a sensation very similar to touching an exposed electric light wire, tax the power of endurance almost to the limit and are a decided handicap to close observation of the habits of the snail. It was possible, however, to notice that they were in most cases very active, crawling up the stems of plants, particularly the "Akitabuki". When the leaf was reached they would move but a short distance, suddenly withdraw into the shell and drop to the ground. The leaves were quite

hot to the touch and it is possible that the heat causes them to drop. Numbers of broken shells among the rocks on the ground attested to the dangers attending this form of "sport". If the fall did not prove disastrous the snail began crawling almost immediately after dropping, presumably to repeat the experience.

Other species of shells collected on Saghalien were:—
Succinea lauta karaftoensis Pilsbry. On partly decaying leaves in damp places at Ichinosawa, Kiminai and Kawakami.

Kaliella gudei Pilsbry. Ichinosawa.

Gonyodiscus pauper Gould. On decaying logs and stumps and under bark, at Ichinosawa, Kiminai and Kawakami.

Pristiloma japonica Pilsbry. Ichinosawa.

Columella edentula Drap. On stems of "Akita buki" and other large leaved plants, at Ichinosawa, Kiminai and Kawakami.

Zoogenetes harpa Say. Ichinosawa.

Lymnaea sp. Kiminai River.

Margaritana margaritifera, L. One specimen. Kiminai River.

THE MOLLUSCA OF LAKE BAIKAL

BY T. D. A. COCKERELL

I have just returned from a trip to Lake Baikal, where, as the guest of the Biological Station of the University of Irkutsk, I had the great pleasure of seeing the Baikal snails alive, dredged up from the stony bottom in a few fathoms of water. When I reached the lake, I hastened to the shore, expecting to find the snails at the water's edge, but none could be seen. They do not exist along the shore line, but only some distance out, in the deeper water. At the station they have devised an ingenious apparatus for